



STIC Search Report

EIC 3700

STIC Database Tracking Number: 135265

TO: Andres Kashnikow
Location: cp2 2a01
Art Unit: 3700
Monday, October 18, 2004

Case Serial Number: 10/782750

From: Terry Solomon
Location: EIC 3700
CP2-2C08
Phone: 305-5932

Terrance.solomon@uspto.gov

Search Notes

No litigation found on US Pat. 6348069.

Sources: Lexis/Nexis and Questel-Orbit

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: ANDY KASHNIKOW Examiner #: 60484 Date: 10/18/04
 Art Unit: 3700 Phone Number 308-1137 Serial Number: 10782750
 Mail Box and Bldg/Room Location: CP2-2A01 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

LIT. SEARCH - U.S. PATENT NO. 6,348,069

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

| | | |
|--|--|------------------------------|
| Searcher: <u>Solomon</u> | NA Sequence (#) _____ | STN _____ |
| Searcher Phone #: <u>305-5932</u> | AA Sequence (#) _____ | Dialog _____ |
| Searcher Location: <u>CP2 2C48</u> | Structure (#) _____ | Questel/Orbit <u>\$10.22</u> |
| Date Searcher Picked Up: <u>10-18-04</u> | Bibliographic _____ | Dr.Link _____ |
| Date Completed: <u>10-18-04</u> | Litigation <input checked="" type="checkbox"/> | <u>Lexis/Nexis</u> |
| Searcher Prep & Review Time: <u>2</u> | Fulltext _____ | Sequence Systems _____ |
| Clerical Prep Time: _____ | Patent Family _____ | WWW/Internet _____ |
| Online Time: <u>4</u> | Other _____ | Other (specify) _____ |

185360 (09) 6348069 February 19, 2002

Time of Request: October 18, 2004 10:44 AM EDT

Research Information:

Utility, Design and Plant Patents
patno=6348069

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6348069

February 19, 2002

Engineering of strong, pliable tissues

REISSUE: February 19, 2004 - Reissue Application filed Ex. Gp.: 3738; Re. S.N. 10/782,750 (O.G. August 10, 2004)

APPL-NO: 185360 (09)

FILED-DATE: November 3, 1998

GRANTED-DATE: February 19, 2002

ASSIGNEE-AT-ISSUE: Children's Medical Center Corporation, Boston, Massachusetts, 02

ASSIGNEE-AFTER-ISSUE: January 8, 2002 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., CHILDREN'S MEDICAL CENTER CORPORATION 300 LONGWOOD AVENUE BOSTON MASSACHUSETTS 02115, Reel and Frame Number: 012435/0361

LEGAL-REP: Holland & Knight LLP

Selected file: PLUSPAT
PLUSPAT - (c) Questel-Orbit, All Rights Reserved.
Comprehensive Worldwide Patents database

**** SS 2: Results 1**
PRT SS 2 MAX 1 LEGALALL

1 / 1 PLUSPAT - @QUESTEL-ORBIT

Patent Number :

US6348069 B1 20020219 [US6348069]

Title :

(B1) Engineering of strong, pliable tissues

Patent Assignee :

(B1) CHILDRENS MEDICAL CENTER (US)

Patent Assignee :

Children's Medical Center Corporation, Boston MA [US]

Inventor(s) :

(B1) CHAIGNAUD BEVERLY E (US); BREUER CHRISTOPHER K (US); SHIN OKA
TOSHIRARU (US); VACANTI JOSEPH P (US)

Application Nbr :

US18536098 19981103 [1998US-0185360]

Filing Details :

Divsn of US445280 19950519 [1995US-0445280]

Division of: US5855610

Priority Details :

US18536098 19981103 [1998US-0185360]

US44528095 19950519 [1995US-0445280]

Intl Patent Class :

(B1) A61F-002/02

EPO ECLA Class :

A61L-027/18 C08L-067:04

A61L-027/38

A61L-027/50E

US Patent Class :

ORIGINAL (O) : 623011110

Document Type :

Corresponding document

Citations :

US1995970; US2609347; US2653917; US2659935; US2664366; US2676945;
US2683136; US2703316; US2758987; US2846407; US2951828; US3514791;
US3531561; US3826241; US3880991; US3883393; US3902497; US3935065;
US3949073; US3960150; US3974526; US3992725; US3995444; US4026304;
US4060081; US4069307; US4137921; US4141087; US4144126; US4186448;
US4192827; US4205399; US4228243; US4239664; US4243775; US4277582;
US4280954; US4304591; US4304866; US4328204; US4347847; US4348329;
US4352883; US4356261; US4391797; US4416986; US4427808; US4431428;
US4438198; US4439152; US4440921; US4444887; US4446229; US4446234;
US4450150; US4456687; US4458678; US4485096; US4485097; US4489056;
US4494385; US4495174; US4505266; US4520821; US4528265; US4544516;
US4545082; US4553272; US4559298; US4559304; US4563350; US4563489;
US4563490; US4576608; US4595713; US4609551; US4627853; US4637931;
US4642120; US4645669; US4675189; US4675284; US4681763; US4689293;
US4713070; US4721096; US4734373; US4757017; US4757128; US4778749;
US4801299; US4846835; US4853324; US4868121; US4880622; US4886870;
US4888176; US4891225; US4902289; US4946938; US4963489; US4988761;
US5032508; US5041138; US5219361; US5324519; US5512600; US5514378;
US5772695; US5855608; AU2424588; DE2853614; DE3518150; EP0153896;
EP0248246; EP0248247; EP0226061; EP0282746; EP0344924; EP0361957;
EP0339607; JP62011459; JP63074498; JP63196273; JP63196595; WO8706120;
WO8803785; WO8900413; WO8907944; WO9012603; WO9012604; WO9101720;
WO9206702; WO9207525; WO9307913; WO9308850; WO9316687; WO9421299;
WO94250979

Allcock & Kwon, "An Ionically Cross-Linkable Polyphosphazene: Poly

bis(carboxylatophenoxy)phosphazene and Its Hydrogels and Membranes," *Macromolecules* 22:75-79 (1989).

Allcock & Kwon, "Glycerol Phosphazenes: Synthesis, Properties, and Hydrolysis," *Macromolecules* 21(7):1980-1985 (1988).

Allcock & Scopelianos, "Synthesis of Sugar-Substituted Cyclic and Polymeric Phosphazenes and Their Oxidation, Reduction, and Acetylation Reactions," *Macromolecules* 16(5):715-719 (1983).

Atala and Casale, "Management of Primary Vesicoureteral Reflux," *Infections in Urology* pp 39-43 (Mar./Apr., 1990).

Atala, et al., "Endoscopic Treatment of Vesicoureteral Reflux with a Chondrocyte-Alginate Suspension," *The Journal of Urology* 152:641-643 (Aug., 1994).

Atala, et al., "Endoscopic Treatment of Vesicoureteral Reflux with a Self-Detachable Balloon System," *The Journal of Urology* 148:724-728 (Aug., 1992).

Atala, et al., "Formation of Urothelial Structures in Vivo from Dissociated Cells Attached to Biodegradable Polymer Scaffolds in Vitro," *The Journal of Urology* 148:658-662 (Aug. 1992).

Atala, et al., "Implantation in Vivo and Retrieval of Artificial Structures Consisting of Rabbit and Human Urothelium and Human Bladder Muscle," *The Journal of Urology* 150:608-612 (Aug. 1993).

Atala, et al., "Injectable Alginate Seeded with Chondrocytes as a Potential Treatment for Vesicoureteral Reflux," *The Journal of Urology* 150:745-747 (Aug., 1993).

Atala, et al., "Laparoscopic Correction of Vesicoureteral Reflux," *The Journal of Urology* 150:748-751 (Aug., 1993).

Atala, et al., "Sonography with Sonicated Albumin in the Detection of a Vesicoureteral Reflux," *The Journal of Urology* 150:756-758 (Aug., 1993).

Atala, "Endoscopic Treatment of Reflux with Autologous Bladder Muscle Cells," *American Academy of Pediatrics Meeting held in Dalls, TX Oct. 23, 1994 (Abstract)*.

Atala, "Laparoscopic Treatment of Vesicoureteral Reflux," *Dia. Ped. Urol.* 14:212 (1993).*

Baklund, et al. "Toward a Transplantation Therapy in Parkinson's Disease," *Annals of the N.Y. Acad. of Sci.* 495:658-673 (1987).

Bazeed, et al. "New Surgical Procedures for Management of Peyronie Disease," *Urology* 21(5), 501-504 (1983).

Bennett & Hirt, "A History of Tissue Expansion," *Dermatol. Surg. Oncol.* 19:1066-1073 (1993).

Ben-Ze'Ev, et al. "Cell-Cell and Cell-Matrix Interactions Differentially Regulate the Expression of Hepatic and Cytoskeletal Genes in Primary Cultures of Rat Hepatocytes," *Proc. Natl. Acad. Sci. USA* 85:2161-2165 (Apr. 1988).

Berrino, et al. "Surgical Correction of Breast Deformities Following Long-Lasting Complications of Polyurethane-Covered Implants," *Ann. Plast. Surg.*, 24:481 (1990).

Biers, "Organogenesis' Human Artery Equivalent May Revolutionize Vascular Grafts," Genetic Engineering News (Nov./Dec. 1987).

Bissell, et al. "The Role of Extracellular Matrix in Normal Liver," Scand. J. Gastroenterol., 23:107 (1988).

Bissell, et al., "Interactions of Rat Hepatocytes with Type IV Collagen, Fibronectin and Laminin Matrices, Distinct Matrix-Controlled Modes of Attachment and Spreading," European Journal of Cell Biology 40:72-78 (1986).

"Brain Graft Seeks to Relieve Huntington Disease Patient," New York Times (Mar. 4, 1988).

Bissell, "Support of Cultures Hepatocytes by a Laminin-Rich Gel," J. Clin. Invest. 79:801-812 (1987).

Bjorklund, Annals of the N.Y. Academy of Science 495:676-686 (1987).

Blaivas, et al., "When Sphincter Failure is the Cause of Female Stress Incontinence," Contemporary Urology 5(3):33-54 (Mar., 1993).

Bohn, et al., "Adrenal Medulla Grafts Enhance Recovery of Striatal Dopaminergic Fibers," Science 238(4817):913-916 (Aug. 21, 1987).

Breuer, et al., "Tissue Engineering Heart Valves," American Chemical Society Spring Meeting, (Apr. 2-6, 1995).

Brown, "Fibrin-Collagen Nerve Repair Device," Inventors: Russ Griffiths, Larry Stensaas & Ken Horch, Letter dated May 10, 1988.

Burke, "The Effects of the Configuration of an Artificial Extracellular Matrix on the Development of a Functional Dermis," The Role of Extracellular Matrix in Development 351-355 (Alan R. Liss, Inc., NY 1984).

Cao, et al., "Bone Reconstruction with Tissue-Engineered Vascularized Bone," (Abstract) Apr. 30-May 3, 1995).

Cao, et al., "The Generation of Neo-Tendon Using Synthetic Polymers seeded with Tenocytes," Transplantation Proceedings, 26(6):3390-3392 (1994).

Chaikin, "Tissue Engineering: Science Non-Fiction," Medical Industry Executive pp 6-7 (May, 1993).

Chuang, et al., "Sheath Needle for Liver Biopsy in High-Risk Patients," RSNA pp 261-262. (1988).

Cilento, et al., "Phenotypic and Cytogenic Characterization of Human Bladder Urothelia Expanded in Vitro," Microbiology & Immunology 152:665-670 (Aug., 1994).

Claes, et al., "Pulmonary Migration Following Periurethral Polytretrafluorethylene Injection for Urinary Incontinence," The Journal of Urology 142:821-822 (Sep., 1989).

Cohen, "Navigating Through Tissue Expansion Terminology," J. Dermatol. Surg. Oncol. 19:614-615 (1993).

Cosimi, et al., "Transplantation of Skin," Surgical Clinics of N.A. 58(2), 435-451 (Apr., 1978).

Collier, et al., "Norepinephrine Deficiency and Behavioral Senescence in Aged Rats: Transplanted Locus Ceruleus Neurons as an Experimental Replacement Therapy," Annals of The New York Academy of Science 495:396-403 (1987).

Culliton, "Gore Tex Organoids and Genetic Drugs," Science 246:747-749 (1989).

Da Silva, "An In Vivo Model to Quantify Motor and Sensory Peripheral Nerve Regeneration Using Bioresorbable Nerve Guide Tubes," Brain Research, 342:307-315 (1985).

Davis., et al., "Human Amnion Membrane Serves as a Substratum for Growing Axons in Vitro and in Vivo," Science, 236:1106-1109 (May 29, 1987).

Del Cerro, et al., "Retinal Transplants into One Anterior Chamber of the Rat Eye," Neuroscience 21:(3)707-23 (Jun. 1987).

Doillon, et al., "Collagen-Based Wound Dressings: Control of the Pore Structure and Morphology," Journal of Biomedical Materials Research, 20:1219-1228 (1986).

Doillon, et al., "Epidermal Cells Cultured on a Collagen-Based Material," G. W. Bailey, Editor, Proceedings of the 44th Annual Meeting of the Electron Microscopy Society of America, (1986).

Ebata, et al. "Liver Regeneration Utilizing Isolated Hepatocytes Transplanted into the Rat Spleen," Surg.

Publication Stage :

(B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001

Abstract :

It has been discovered that improved yields of engineered tissue following implantation, and engineered tissue having enhanced mechanical strength and flexibility or pliability, can be obtained by implantation, preferably subcutaneously, of a fibrous polymeric matrix for a period of time sufficient to obtain ingrowth of fibrous tissue and/or blood vessels, which is the removed for subsequent implantation at the site where the implant is desired. The matrix is optionally seeded prior to the first implantation, after ingrowth of the fibrous tissue, or at the time of reimplantation. The time required for fibrous ingrowth typically ranges from days to weeks. The method is particularly useful in making valves and tubular structures, especially heart valves and blood vessels.

Update Code :

2002-09

1 / 1 LGST - ©EPO

Patent Number :

US6348069 B1 20020219 [US6348069]

Application Number :

US18536098 19981103 [1998US-0185360]

Action Taken :

20020108 US/AS-A

ASSIGNMENT

OWNER: CHILDREN'S MEDICAL CENTER CORPORATION 300 LONGWOOD

ASSIGNMENT OF ASSIGNORS INTEREST;ASSIGNORS:VACANTI, JOSEPH P.;BREUER, CHRISTOPHER K.;CHAIGNAUD, BEVERLY E.;AND

OTHERS;REEL/FRAME:012435/0361;SIGNING DATES FROM 19950712 TO 19950714

20040810 US/RF-A
REISSUE APPLICATION FILED
EFFECTIVE DATE: 20040219
Update Code :
2004-41

1 / 1 CRXX - ©CLAIMS/RRX

Patent Number :

6,348,069 A 20020219 [US6348069]

Patent Assignee :

Children's Medical Center Corp The

Actions :

20040219 REISSUE REQUESTED

ISSUE DATE OF O.G.: 20040810

REISSUE REQUEST NUMBER: 10/782750

EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3738

Reissue Patent Number:

Session finished: 18 OCT 2004 Time 16:39:56

QUESTEL.ORBIT thanks you. Hope to hear from you again soon.